

**AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows:

We claim:

1-3. (cancelled)

4. (currently amended) A method of manipulating neuronal ion channels, comprising: transfecting a cell that expresses an mRNA encoding a Kv3.4 protein with a vector encoding an siRNA directed against said mRNA encoding a Kv3.4 protein, wherein said siRNA is complementary to ~~target sequence within~~ a portion of SEQ ID NO:6, wherein said portion of SEQ ID NO:6 is the portion of SEQ ID NO:6 starting with gcagaatggtgacgctaat (SEQ ID NO:3) and ending with ggcagtgttgcgaaac (SEQ ID NO:4), and wherein said siRNA is capable of inhibiting Kv3.4 expression in said cell, and wherein said cell is located in vitro or ex vivo.

5-9. (cancelled)

10. (previously presented) The method of claim 4, further comprising the step of transplanting said cell into a subject.

11-16. (cancelled).

17. (previously presented) The method of claim 4, wherein said siRNA is directed toward a Kv3.4 target selected from the group consisting of SEQ ID NOS: 3 and 4.